Work Task E9: Imperial Demonstration Ponds, Imperial National Wildlife

Refuge

Partners: U. S. Fish and Wildlife Service (FWS)

Bureau of Reclamation (Reclamation)

Point of Contact: Nathan Lenon, LC-2457 (702) 293-8015

Purpose: Expansion of the existing ponds for marsh and backwater

restoration habitat credit.

Conservation Measures: Potential site for creation of habitat for the covered species.

Long-Term Goal: This project was originally initiated in fulfillment of the 1997

Biological Opinion. Several deficiencies exist with the site, as constructed, which have resulted in impaired water quality.

Additionally, Imperial National Wildlife Refuge wishes to dedicate the entire site exclusively to native fish, and expand the existing complex to create additional habitat in support of the LCR MSCP program. Reclamation is working with INWR and other project stakeholders to develop a plan to address water quality concerns

and create the additional habitat acreage.

Location: Imperial National Wildlife Refuge

FY05 Estimate: \$105,000 will fund in-house staff including Yuma Area Office's

engineering support office.

Project Description: The Imperial Demonstration Ponds, also referred to as the DU2

Ponds, were originally constructed to provide a mixture of habitat types, including isolated backwaters, marsh, and riparian. The site consists of 4 ponds which are connected by a single channel that supplies fish-free water from a dedicated well. Some degree of independent water management is possible via water control structures between each pond; however, there is only one inlet and one outlet for the entire site, meaning that fresh water can only be

delivered to a single location.

The ponds were originally renovated in the fall of 2002, and stocked with razorback suckers in the spring of 2003. The survival of razorback suckers in the first year was extremely low, with the two probable causes given for their decline being low dissolved oxygen and the presence of large numbers of non-native warmouth

sunfish.

Due to competing needs of riparian and backwater habitats, water management (as originally designed) was not possible; therefore the decision was made to designate the entire site for native fish. The philosophy was that managing the site primarily for native fish would provide additional flexibility to address water quality concerns. A focus group was held in December 2004 to involve the expertise of the Lower Colorado River Native Fish Workgroup in developing recommendations for how to best manage the site. The group decided to re-design and expand the site to address water quality concerns while providing additional acreage in support of the LCR MSCP program.

An interdisciplinary workshop is scheduled for the week of May 23, 2005. The objective of this meeting is to draft a design for the retrofitting and expansion work. This workgroup will solicit input from subject matter experts in the fields of native fish biology, hydrology, wetland science, and engineering, and will involve participants from the LCR native fish workgroup.